Question 3: Pesticide Safety Worksheets

Reference:
Applying Pesticides Correctly - A Guide for Private and Commercial Applicators
Unit 4: Pesticides in the Environment, Pages 5-7

Pesticide Movement

Pesticides that move away from the release site may cause environmental contamination. Pesticides move away from the release site both indoors and outdoors and may cause harm in both environments. Pesticides move in air, through wind, or through air currents generated by ventilation systems. Pesticides also move in water, through runoff or leaching, and on or in objects, plants, animals, or humans that move or are moved offsite.

Air

Pesticide movement away from the release site in the air is usually called drift. Pesticide particles, dusts, spray droplets, and vapors all may be carried offsite in the air. People who mix, load, and apply pesticides outdoors usually are aware of the ease with which pesticides drift offsite. People who handle pesticides indoors may not realize how easily some pesticides move offsite in the air currents created by ventilation systems and by forced-air heating and cooling systems.

Droplets

Small spray droplets are easily carried in air currents. High pressure and fine nozzles produce very small spray droplets that are very likely to drift. Lower pressure and large droplet nozzles have less drift potential. Pesticides released close to ground or floor level are less likely to be caught up in air currents as those released from a greater height. Pesticides applied in an upward direction or from an aircraft are the most likely to be carried on air currents.

Vapors

Pesticide vapors from applications such as fumigation, move about easily in air. Persons using fumigants must take precautions to make sure the fumigant remains in a sealed container until it is released into the application site, which also must be sealed to prevent the vapor from escaping. Some nonfumigant pesticides also vaporize and escape into the air. The labeling of volatile pesticides often includes warning statements that the pesticide handler should heed.

Water

Pesticide particles and liquids may be carried offsite in water. Pesticides can enter water through drift, leaching, and runoff from nearby applications, spills, leaks, and back siphoning from nearby mixing, loading, storage, and equipment cleanup sites, and improper disposal of pesticides, rinsates, and containers. Runoff and leaching may occur when too much liquid pesticide is applied, leaked, or spilled onto a surface, or too much rainwater, irrigation water, or other water gets onto a surface containing pesticide residue.

On or In Objects, Plants, or Animals

Pesticides can move away from the release site when they are on or in objects or organisms that move (or are moved) offsite. Pesticides may stick to shoes or clothing, to animal fur, or to blowing dust and be transferred to other surfaces. Pesticides may stick to treated surfaces, such as food or feed products that are to be sold. Crops and animal products will not be over tolerance if the pesticides are applied as directed on the product labeling.